coevolvers

The COEVOLVERS project

co-creates novel types of nature-based solutions

A coevolutionary approach to unlocking the transformative potential of nature-based solutions (NBS) for more inclusive and resilient communities.

COEVOLVERS seeks new practices for designing and implementing nature-based solutions to help local communities adapt to societal and environmental change while promoting the long-term well-being of both people and nature.

Climate change and biodiversity loss are challenging citizens' everyday lives in many ways, for instance by causing extreme weather conditions (floods, droughts and storms) and worsening health- and wellbeing-related problems.

Nature-based solutions tackle these issues and contribute to the well-being of both nature and humans. For example, green roofs and wetlands support water management in extreme weather conditions and create green spaces with health benefits for people and diverse habitats for wildlife.

To date, NBS have not paid sufficient attention to involving citizens, other species and ecosystems into the design and implementation processes. NBS have not been able to support a longterm multispecies sustainability transformation.

COEVOLVERS believe that NBS should strengthen a reciprocal and mutual relationship between human activities and nature. Therefore, the design and implementation of NBS calls for a co-evolutionary understanding of how NBS emerge, formalise and change.

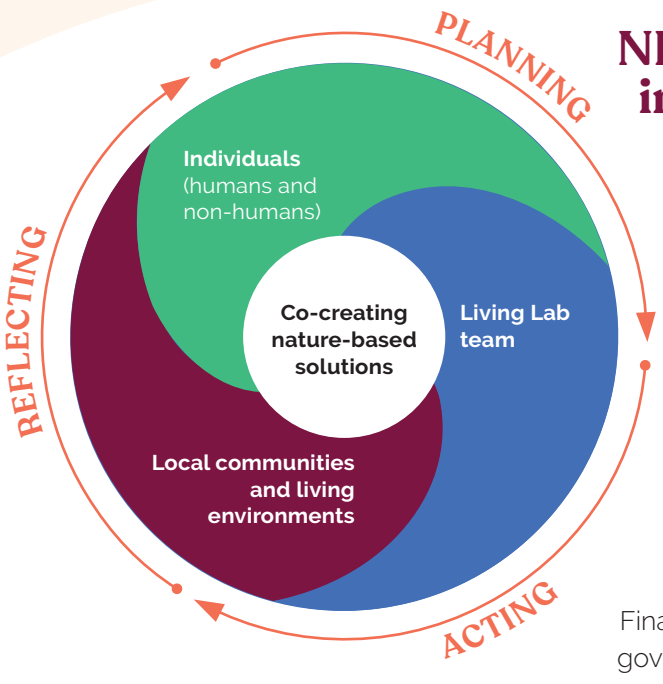
The ultimate goal is to provide an understanding of the genesis and establishment of fairer NBS, especially from the perspective of the most vulnerable humans and other species, individual species, plants, animals and ecosystems.

COEVOLVERS co-create and pilot just NBS governance models by co-developing innovative techniques and tools for the digital, economic and ecological transition.

These tools will be shared to inform and motivate decision-makers and policymakers to ensure that new NBS increase the resilience of communities and promote the sustainability transformation.

How can we contribute to the societal change needed to address the ongoing biodiversity and climate crisis?

Current challenge in NBS	COEVOLVERS' contribution
Insufficient inclusiveness	**Objective 1:** Advance transdisciplinary knowledge and theory about nature-based solutions and the underlying issues affecting their feasibility and potential
Implementation	
Unfair benefit-sharing	**Objective 2:** Co-create and pilot just NBS governance models by co-developing innovative techniques and tools for the digital, economic, and ecological transition
Financial uncertainty	
Disconnected natural and social values	**Objective 3:** Boost co-creation approaches and engage and motivate decision-makers and policymakers to ensure they have transformational impacts at the local, national and EU level
Technocratic view	



NBS will be co-created and developed in seven locations around Europe

COEVOLVERS are co-developing novel practices with seven different communities across Europe. In these Living Labs, various knowledge holders co-create ideas, tools, and practices to solve a range of place-specific problems.

These problems will be explored and analysed with local Living Lab participants using various digital tools (like digital storytelling and photo voice), creative methods (like role-based board games and sensory walks), and innovative solutions for the design and management of NBS.

Finally, practices and tools for ensuring more inclusive and just governance practices are designed together.

Living Labs (LLs)

LL1 **Greening a post-industrial suburb**
Pansio-Perno, Turku, Finland

LL2 **Connected community woodland**
Murray Park, Alford, Scotland, UK

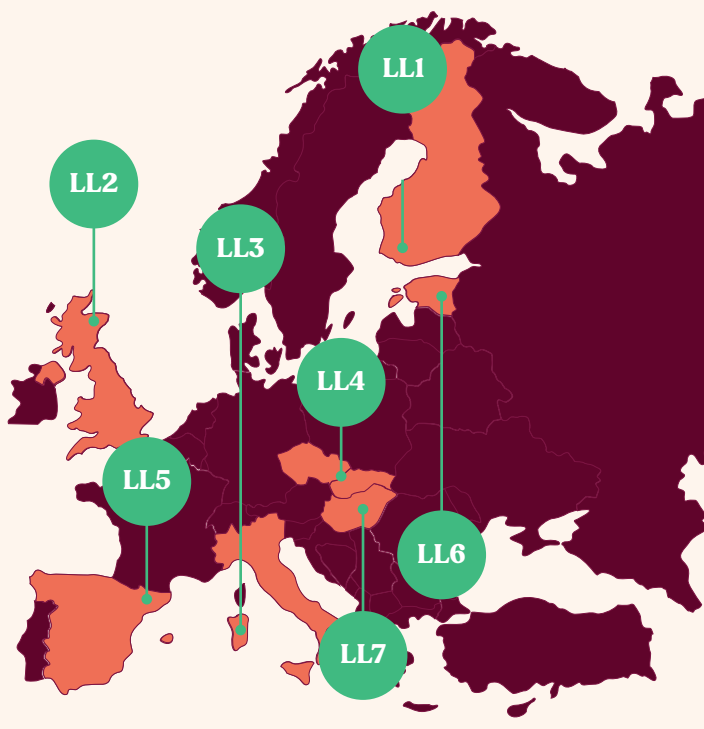
LL3 **Connecting for diversity**
Molentargius-Saline Regional Park, Cagliari, Italy

LL4 **Cross-border virtual commons**
Beskydy, Czech Republic and Slovakia

LL5 **Wildfire eaters**
Barcelona-Baix Llobregat, Catalonia, Spain

LL6 **Multispecies city**
City of Tartu, Estonia

LL7 **Healing garden**
Boldog Gellért Hospital, Pomáz–Kiskovácsi, Hungary



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Project partners

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University of Cagliari (Italy)
Institute of Forest Ecology Slovak Academy of Sciences (Slovakia)
James Hutton Institute (United Kingdom)
Environmental Social Science Research Group Nonprofit Ltd. (Hungary)
University of Tartu (Estonia)
Forest Science and Technology Centre of Catalonia (Spain)
CETIP Network (Czech Republic)
City of Turku (Finland)
Magház Association (Hungary)

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LL1 Greening a post-industrial suburb

Pansio-Perno, Turku, Finland

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The loss of green space due to urban densification has led to ecological and social problems, including decreased biodiversity and human well-being. Compensating for such losses may improve the well-being of local citizens and the environment. Pansio-Perno LL in the City of Turku identifies and tests various means and measures that may compensate for ecological and social losses in collaboration with residents, local industries, and administrative and planning authorities.

LL2 Connected community woodland

Murray Park, Alford, Scotland, UK

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Social exclusion and disconnection from nature are key issues in urban and rural areas. Cultivating a deeper and more meaningful connection with nature fosters a sense of harmony and well-being. Natural areas provide a place for community interaction and deepen human-nature connections. LL Scotland is co-creating a management model for a rural woodland, Murray Park, with strengthened community cohesion between humans and nature. This will build a deeper understanding of and affinity for natural habitats so those involved become their custodians, caring for and protecting them.

LL3 Connecting for diversity

Molentargius-Saline Regional Park, Cagliari, Sardinia, Italy

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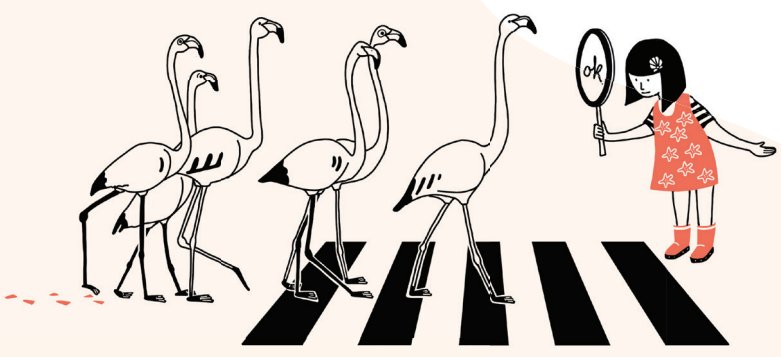
The ecosystems and biodiversity in natural parks close to urban areas are often threatened by human activities, such as overuse and littering, which reflect a lack of environmental awareness and sense of responsibility for nature. LL Cagliari will co-create activities and practices that increase awareness and foster the shared commitment of different user groups to the sustainable use of the park, focusing on respecting the needs of other species and the whole ecosystem. The work will be carried out in Molentargius-Saline Regional Park, an important wetland for aquatic birds.



LL4 Cross-border virtual commons

Beskydy region, Czechia and Slovakia

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Climate change constitutes a major environmental challenge and may lead to water shortages, biodiversity loss and accelerating social dilemmas over the use of natural resources. LL Beskydy is co-creating a common-pool resource regime for the climate-smart management of water and forests and sharing it in an online space (beskydyonline.eu). The digital platform will enable the management of shared goods, communication, and exchange of practices and enhance collective action in Beskydy, a cross-border region between Czechia and Slovakia.

LL5 Wildfire eaters

Barcelona-Baix Llobregat, Catalonia, Spain

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Wildfires harm both people and nature, emphasizing the urgency of implementing effective land-use management and planning. In the metropolitan area of Barcelona, the abandonment of agricultural and forestry practices has led to the excessive accumulation of biomass that poses a danger to the forest and citizens living nearby. Together with local shepherds and municipalities, the LL is developing a payment and contracting scheme for livestock grazing that incentivizes targeted grazing to maintain low vegetation biomass levels and prevent wildfires.

LL6 Multispecies city

City of Tartu, Estonia

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Urban nature is mainly valued for its human-centered aesthetics and preferences, which may not align with the needs of non-human species. Community gardens and biodiversity-friendly gardening practices support a variety of local and native species and their living environments and empower and support local communities socially and economically. LL Tartu promotes co-creative activities that raise awareness about the role of nonhuman species through different forms of participation. Through these, it identifies ways to enhance the consideration of the diversity of species in city planning, various activities related to green spaces, and a sense of place.

LL7 Healing garden

Boldog Gellért Hospital, Pomáz–Kiskovácsi, Budapest, Hungary

LL leader
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Mental health issues are increasing in societies. There is scientific and practical evidence of the positive effects of green space activities (like gardening) on human health and well-being. LL Budapest will co-create a concept for the design of a healing and edible garden in a mental healthcare institute with clients, healthcare professionals, environmental and gardening experts, and some local entities, such as a farm.